(19) World Intellectual Property Organization

International Bureau



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(43) International Publication Date 12 August 2004 (12.08.2004)

PCT

(10) International Publication Number WO 2004/068400 A2

(51) International Patent Classification7:

G06T

(21) International Application Number:

PCT/GB2004/000311

- (22) International Filing Date: 26 January 2004 (26.01.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0301775.3

25 January 2003 (25.01.2003) GB

- (71) Applicant (for all designated States except US): SPIRAL SCRATCH LIMITED [GB/GB]; 23 Kings Mount, Oxton, Prenton, Wirral, Cheshire CH43 5RQ (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WILSON, John, Edley [GB/GB]; 23 Kings Mount, Oxton, Prenton, Wirral, Cheshire CH43 5RQ (GB). REED, Matthew, Gerard [GB/GB]; 39 Ludlow Drive, West Kirby, Wirral, Cheshire CH48 3JG (GB).
- (74) Agent: MCNEIGHT, David, Leslie; Brow Top, Lees Lane, Wilmslow, Cheshire SK9 2LR (GB).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND APPARATUS FOR MAKING IMAGES INCLUDING DEPTH INFORMATION

(57) Abstract: A method for making an image of an object including depth information comprising the steps of: illuminating the object with a periodic pattern of light from an illuminating arrangement; the illuminating arrangement being such that the pattern is in focus in a focal plane and defocuses progressively away from said focal plane; the object being placed such that different parts of it are at different distances from the focal plane; capturing image data from the thus-illuminated object; analysing the captured image data to extract depth information based on the extent of defocussing of the pattern; and displaying an image of the object without the pattern and with depth information. Apparatus or carrying out the method, comprising an illuminating arrangement adapted to illuminate the object with a periodic pattern of light; the illuminating arrangement being such that the pattern is in focus in a focal plane and defocuses progressively away from said focal plane; the object being locatable with respect to the illuminating arrangement such that different parts of it are at different distances from the focal plane; image data capturing means adapted to capture image data from the thus illuminated object; data analysis means adapted to analyse captured image data to extract depth information based on the extent of defocussing of the pattern; and image display means for displaying an image of the object without the pattern and with depth information.